



CITY OF COLLEGE STATION

## DRINKING WATER QUALITY REPORT 2004



**College Station Utilities**

Reliable, Affordable, Community Owned

### YOUR DRINKING WATER MEETS ALL FEDERAL AND STATE STANDARDS

We are pleased to report that, once again in 2004, College Station's drinking water quality met the requirements of all State and Federal drinking water regulations. In fact, although College Station's water is tested for over 100 different contaminants to ensure compliance with the Safe Drinking Water Act (SDWA), only eight (8) regulated contaminants were detected, all well below SDWA limits. The tables show all contaminants detected in College Station's drinking water from Jan. 1, 2002 through Dec. 31, 2004. **Substances that were tested for, but not detected, are not included in this report.**



#### WHERE TO LEARN MORE

We encourage you to learn more about your drinking water! Please contact us at any of the offices below.

##### ADMINISTRATIVE OFFICES

Utility Service Center

(979) 764-3660

1601 Graham Road

P.O. Box 9960

College Station, TX 77842

##### BILLING INFORMATION AND UTILITY CONNECTIONS

Utility Customer Service

(979) 764-3535

1-800-849-6623

<http://epay.cstx.gov/>

310 Krenek Tap Road

PO Box 10230

College Station, TX 77842-0230

##### AFTER HOURS/EMERGENCY

Call 24 hours to report problems: line breaks, sewer backups, other utility-related problems  
(979) 764-3638

##### PUBLIC INFORMATION

Water Presentations, Plant Tours,  
Water Conservation Tips:  
(979) 764-6223

##### ENVIRONMENTAL SERVICES

Backflow Prevention, Water  
Quality Testing, Grease Trap  
Information

(979) 764-3662/3663/6312

##### COLLEGE STATION

##### CITY COUNCIL MEETINGS

2nd and 4th Thursday 7:00 pm

City Hall 1101 Texas Avenue

Meeting Agendas: (979) 764-3541

<http://www.cstx.gov>

##### CITY OF COLLEGE STATION

##### WEBSITE

<http://www.cstx.gov>

#### COLLEGE STATION UTILITIES: A SUPERIOR PUBLIC WATER SYSTEM



College Station's water system has been designated a **Superior Public Water System** by the Texas Commission on Environmental Quality (TCEQ). "Superior" is the highest rating that the State of Texas can give to a public water system. College Station attained this rating by a commitment to providing safe, high quality drinking water to our customers, and by performing better than the minimum State and Federal standards for drinking water.

College Station Utilities is a leading Utility providing high quality, customer-owned service to College Station.

We are committed to:

- Exceptional Reliability
- Outstanding Customer Satisfaction
- Best Value for the Price
- Anticipating the Future
- Improving the Quality of Life



**ON THE COVER:** Elevated storage tanks, like the three-million gallon tank at Park Place, maintain water pressure throughout the city as well as provide water storage for peak demand periods and fire fighting.



# WHAT'S IN MY WATER? WATER QUALITY TEST RESULTS

The State of Texas requires College Station to monitor our drinking water for over 100 different contaminants. This monitoring is conducted monthly, quarterly, annually, or less frequently, depending on the contaminant. The information in this report is based on tests conducted from Jan. 1, 2002 - Dec. 31, 2004. Independent laboratories certified by the EPA and State of Texas perform all testing as required. All substances detected are below the Maximum Contaminant Level (MCL) and do not exceed the health-based standards for drinking water.

## INORGANIC CONTAMINANTS

Year Sampled	Substance	Highest Level	Range Detected	MCL	MCLG	Possible Sources of Substances
2004	Copper	0.002 ppm	0.002 ppm	2 ppm	2 ppm	Corrosion of household plumbing systems; Leaching of wood preservatives; Erosion of natural deposits
2004	Fluoride	1.3 ppm	0 ppm - 1.3 ppm	4 ppm	2 ppm	Erosion of natural deposits; Water additive to promote strong teeth
2004	Nitrate	0.1 ppm	0.1 ppm	10 ppm	10 ppm	Runoff from fertilizer deposits; Leaching from septic tanks; Erosion of natural deposits

## DISINFECTANT RESIDUAL AND DISINFECTION BY-PRODUCTS

Year Sampled	Substance	Highest Level	Range Detected	MCL	MCLG	Possible Sources of Substances
2004	Chlorine	2.14 ppm	0.9 - 2.14 ppm	4 ppm	N/A	Disinfectant Residual; Added to drinking water for disinfection
2004	Total Trihalomethanes	25.2 ppb	23.6 - 25.2 ppb	80 ppb	N/A	By-product of drinking water chlorination

## MICROBIOLOGICAL CONTAMINANTS

Year Sampled	Substance	Highest Monthly % of Positive Samples	MCL	MCLG	Possible Sources of Substances
2004	Total Coliform Bacteria	0%	Presence in over 5% of monthly samples	0%	Naturally present in the environment

Coliform bacteria are used as indicators of microbial contamination of drinking water because they are easily detected and found in the digestive tract of warm-blooded animals. Their absence from water is a good indication that the water is bacteriologically safe for human consumption. College Station Utilities collects a minimum of **81** drinking water samples each month, for analysis by the Brazos County Health Department for Coliform bacteria. **In 2004, NONE of the 970 routine samples tested positive for Total Coliform bacteria.**

## LEAD AND COPPER: REGULATED AT THE CUSTOMER'S TAP

Year Sampled	Substance	90th Percentile *	Action Level	Possible Sources of Substances
2004	Lead	1.8 ppb	15 ppb	Corrosion of household plumbing systems; Erosion of natural deposits
2004	Copper	0.162 ppm	1.3 ppm	Corrosion of household plumbing systems; Leaching of wood preservatives; Erosion of natural deposits

The State of Texas requires the City of College Station to monitor for lead and copper only once every three years, because College Station has historically had low levels of lead and copper in its water. The results in the table below are based on 30 samples collected for the last monitoring, in August 2004.

\* 90th Percentile: 90 % of tap water samples collected were at or below this value. EPA considers the 90th percentile the same as an "average" value for other contaminants. If more than 10 % of tap water samples collected exceed the action level for lead or copper, water systems must take additional steps.

## UNREGULATED CONTAMINANT MONITORING RULE (UCMR) (No Maximum Contaminant Levels)

College Station Utilities participated in gathering data under the UCMR in order to assist EPA in determining the occurrence of possible drinking water contaminants. All unregulated contaminants detected are shown in the table below. This data may also be found on the EPA's website <http://www.epa.gov/safewater/data/ncod.html> or you may call the Safe Drinking Water Hotline: 1-800-426-4791.

Year Sampled	Name of Compound	Amount Detected
2004	Bromodichloromethane	3.50 ppb
2004	Bromoform	12.00 ppb
2004	Dibromochloromethane	10.00 ppb
2004	Bromochloroacetic acid	1.00 ppb

## ALL Drinking Water May Contain Contaminants

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of a contaminant in your drinking water does not necessarily pose a health risk. In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the maximum amount of certain contaminants in drinking water provided by public water systems. More information about contaminants and potential health effects can be obtained by calling the

**EPA Safe Drinking Water Hotline:  
800-426-4791**



# UNDERSTANDING THE WATER QUALITY TEST RESULTS

## OTHER SUBSTANCES

The table below lists amounts of other substances for which College Station's water is tested. The Secondary Maximum Contaminant Levels (SMCL) are not enforced, but rather are intended as guidelines. These items primarily affect aesthetic qualities relating to drinking water. **All substances listed in the following table were tested for in 2002.**

Substance	Detected Levels	SMCL
Alkalinity (Bicarbonate)	366 ppm	No Recommendation
Alkalinity (Carbonate)	11 ppm	No Recommendation
Alkalinity (Phenolphthalein)	5 ppm	No Recommendation
Alkalinity (Total)	377 ppm	No Recommendation
Calcium	2.96 ppm	No Recommendation
Chloride	56.8 ppm	250 ppm
Fluoride	0.36 ppm	2.0 ppm
Magnesium	0.65 ppm	No Recommendation
pH	8.46	>7.0
Sodium	200 ppm	No Recommendation
Specific Conductance	891 $\mu$ mhos/cm	No Recommendation
Sulfate	6.78 ppm	300 ppm
Total Dissolved Solids	541 ppm	1,000 ppm
Total Hardness (as $\text{CaCO}_3$ )	8.14 ppm	No Recommendation



**TIP!** To convert hardness from parts per million (ppm) to grains per gallon (gpg), divide hardness in ppm by 17.1 (one gpg is 17.1 ppm).



## ASSESSING COLLEGE STATION'S SOURCE WATER

The TCEQ has completed a Source Water Susceptibility Assessment (SWSA) for College Station's source water, and the results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for College Station's water system are based on this susceptibility and previous sample data. All contaminants that were detected through this sampling are described in this Drinking Water Quality Report. For more information on source water assessments and protection efforts at College Station Utilities, please contact Jennifer Nations at 764-6223 or [jnations@cstx.gov](mailto:jnations@cstx.gov).

## DEFINITIONS

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements a water system must follow.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the maximum contaminant level goals as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Micromhos per Centimeter ( $\mu$ mhos/cm):** A measure of the electrical conductivity of a water sample. Pure water has a conductivity of 0.005 micromhos per centimeter at 25° Celsius.

**Nephelometric Turbidity Units (NTU):** A measure of turbidity.



### DID YOU KNOW?

One part per **billion** is equivalent to one cent in **\$10 million**.

One part per **million** is equivalent to one cent in **\$10,000**.

**ppb:** parts per billion or micrograms per liter ( $\mu$ g/L).

**ppm:** parts per million or milligrams per liter (mg/L).

**pH:** The pH scale extends from 0, very acidic, to 14, very alkaline or basic. A pH of 7 is neutral. Most natural waters fall within the range of 4 to 9.

**picoCuries per Liter (pCi/L):** Unit of measurement for radioactive substances.

**Secondary Maximum Contaminant Level (SMCL):** The level of a contaminant that represents reasonable goals for drinking water quality. SMCLs pertain to contaminants that primarily affect the aesthetic qualities relating to drinking water.

**Turbidity:** A measure of the cloudiness of water.



If you have questions about the information in this report, please contact:

**Jennifer Douglass Nations**  
**Water Resource Coordinator**  
**(979) 764-6223**  
**[jnations@cstx.gov](mailto:jnations@cstx.gov)**

Additional copies of this report are available at the Utility Service Center and Utility Customer Service buildings and on our website: <http://www.cstx.gov/>



## BACKFLOW PREVENTION: Is your hose hazardous to your health?

The term **BACKFLOW** refers to the flow of water in the direction opposite to the normal flow. The reversal of flow can be caused by either **BACKSIPHONAGE** or **BACK-PRESSURE**, for example when water pressure drops during a water line break or fire event. A cross-connection is a connection between any part of the drinking water system and another connection where it is possible for other substances to enter the drinking water system. During a backflow event, pollutants or contaminants can enter the drinking water system through unprotected cross-connections. You can protect yourself from backflow by installing hose-bib vacuum breakers on your home's outdoor faucets, and installing an approved backflow prevention device on your irrigation system. **For more information on backflow, contact Environmental Services at 764-3660, or go to <http://www.cstx.gov/utilities>.**



A hose submerged in a pool or bucket is a common, but easily fixed, cross-connection. Be sure to keep an air gap between the water surface and the hose.

## How Much Do You Know About Your Water?



Know your water.

[www.water-iq.org](http://www.water-iq.org)

A recent study found that only 28 percent of Texans say they "definitely know" the natural source of their drinking water (Texas Water Development Board, 2004). (If you don't know where College Station's water comes from, read the next page!)

Fortunately, the same study also found that 87 percent of Texans say they're more likely to conserve water after learning more about why it is important and ways to be more efficient. Here are a few tips to get you started:

- Water lawns early in the morning to avoid evaporation.
- Avoid watering during the heat of the day.
- Don't water the concrete. It will never grow!
- Apply a thick layer of mulch to landscape beds.
- Turn the water OFF when brushing teeth or shaving.
- Check toilets, faucets, and sprinkler systems for leaks, and fix them!

By saving water now, we can all help to delay the construction of costly new water production and wastewater treatment facilities.

## WATER UTILITY PROFILE (Jan. - Dec. 2004)

Water Source	Groundwater: Carrizo-Wilcox Aquifer
Water Treatment Process	Cooling, Aeration, Chlorination, Fluoridation
Groundwater Temperature	118 degrees F
Treated Water Temperature	85 degrees F
Firm Production Capacity (Gallons/Day)	26,000,000
Annual Water Consumption (Gallons)	3,255,816,059
Peak Day (Gallons)	16,424,455
Annual Wastewater Flow (Gallons)	2,466,941,805
Average Daily Demand (Gallons)	8,920,044
Average Daily Demand per Person	113 gallons per capita per day (gpcd)
Ground Storage	Dowling Road Pump Station (8 MG)
Elevated Storage	Park Place (3 MG) Greens Prairie (2 MG)
Number of Fire Hydrants	2,077
Miles of Water Line	332.5

## CAPITAL PROJECTS UPDATE

In 2004, College Station Utilities continued work on two key projects: the Parallel Water Transmission Line, Westside Water Services. The Parallel Water Transmission Line project involves installation of approximately 13 miles of 48-inch diameter steel pipe to transport raw drinking water from the City's wellfield pump station to the Dowling Road Pump Station. The Westside Water Services project involves installation of an 18-inch water distribution line along FM 2818 on the west side of College Station.



During these construction projects, the City of College Station obtained supplemental water from Texas A&M University (TAMU). The City of College Station has interconnects with the City of Bryan and TAMU, to provide or obtain water on an emergency basis. The table below shows the dates when we obtained water from TAMU in 2004 and the amount. To learn more about TAMU drinking water quality please call (979) 845-4541.

Date	Supplier	Amount
Jan. 1 - 31 2004	TAMU	12,854,000 gallons
Feb. 1 - 12, 2004	TAMU	9,261,000 gallons
March 2004	TAMU	1,512,000 gallons

## FREQUENTLY ASKED QUESTIONS

### Where Does College Station's Water Come From?

The City of College Station obtains its drinking water from deep wells located in the Simsboro Sand formation of the Carrizo-Wilcox Aquifer. College Station also maintains interconnections with the City of Bryan and Texas A&M University water systems, both of which also obtain their drinking water from the Simsboro Sand.

After the water is pumped from the ground, it is routed through cooling towers at the Sandy Point Pump Station where its temperature is lowered from about 118° Fahrenheit to below 90° F.

Cooled water leaves the Sandy Point Pump Station through thirteen miles of transmission line to the Dowling Road Pump Station. Here, we add chlorine to the water for disinfection, and fluoride for dental health.



**FUN FACT:** In 2004, College Station Utilities maintained nearly 30,000 water meters. Do you know where your water meter is?

### What is in my water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

### Is Bottled Water Safer?

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amounts of certain contaminants in water provided public water systems, such as College Station Utilities. Food and Drug Administration (FDA) regulations establish limits for bottled water which must provide the same protection for public health as the EPA's limits. When drinking water meets all Federal and State standards, as College Station's water does, there may not be any health-based benefits to purchasing bottled water or point-of-use devices.

### What if my water looks dirty or "rusty"?

Contaminants may be found in drinking water that may cause taste, color, or odor problems. Occasionally water may become discolored due to a water line break. These types of problems are not necessarily causes for health concerns.

If you experience discolored water, please report it to **Utility Dispatch (24 hours) at 764-3638** so that we may promptly correct the problem.

For more information on taste, odor or color of drinking water, please contact College Station Utilities at (979) 764-3660.

### Who do I contact for field trips to the water plant or class presentations?

College Station Utilities contacts over 6,000 customers each year through a variety of methods, including plant tours and community presentations. Schedule a tour or presentation for your group today by calling 764-6223 or email: [jnations@cstx.gov](mailto:jnations@cstx.gov).

### I have a weakened immune system. What do I need to know about water quality?

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immuno-compromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. These people should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the:

**Safe Drinking Water Hotline**  
(800) 426-4791

<http://www.epa.gov/safewater>



### WHERE DO I PAY MY UTILITY BILL?

CSU customers can pay their utility bills in one of five easy ways:

1. In Person:  
310 Krenek Tap Road
2. Online: <http://epay.cstx.gov>
3. By Phone: 979-764-EPAY
4. Automatic Bank Draft
5. By Mail:  
College Station Utilities  
P.O. Box 10230  
College Station, TX 77842

